

### **REMARKS**

Claims 1-2 and 4-29 remain pending in the present application. Claims 1, 15, 16, 18, 26, and 28 are amended. Claim 30 has been added. Support for the amendment to claims 1, 15, 16, 18, 26, and 28 and new claim 30 can be found, *inter alia*, on pages 1-3 of the specification. Claims 1, 15, 16, 18, 26, and 28 are independent.

### **Rejections Under 35 U.S.C. § 102**

Claims 1-2, 4-8, 10-14, 17-18, and 21-29 are rejected under 35 U.S.C. § 102(e) as being anticipated by Parkvall (U.S. Patent No. 6,542,736 B1). Applicants respectfully traverse.

With regard to independent claim 1, Applicants assert that Parkvall does not disclose receiving, from a mobile station, a plurality of mobile station capabilities and selecting one of a plurality of transmit configurations using at least one of the plurality of mobile station capabilities received, the plurality of mobile station capabilities including at least two capabilities from a list including a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input/multi-output configuration. Instead, Parkvall discloses that in order to adapt to rapidly changing radio channel conditions, a maximum rate and sector request information is transmitted by the mobile terminal. As the mobile terminal moves or radio channel conditions change, it may be necessary

for the mobile terminal to select a new maximum data rate, sector, or base station (Col. 8, line 55-Col. 9, line 10). As disclosed in Parkvall, the mobile station selects a data rate, sector, or base station. Therefore, Parkvall cannot disclose or suggest receiving, from a mobile station, a plurality of mobile station capabilities and selecting one of a plurality of transmit configurations using at least one of the plurality of mobile station capabilities received, the plurality of mobile station capabilities including at least two capabilities from a list including a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input/multi-output configuration as recited in claim 1. Parkvall fails to disclose each and every element of independent claim 1.

With regard to claims 15 and 26, claims 15 and 26 include similar limitations as claim 1 and are allowable at least for the reasons stated for claim 1.

With regard to independent claim 16, Parkvall fail to disclose sending, from a mobile station, a plurality of mobile station capabilities; and receiving, by a mobile station, a selected transmit configuration of a plurality of transmit configurations that is based on at least one of the mobile station capabilities sent, the plurality of transmit configurations including at least two of a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input configuration. As discussed above in the traverse of claim 1, Parkvall discloses a mobile terminal

that selects a data rate, sector, or base station. Therefore, Parkvall cannot disclose or suggest sending, from a mobile station, a plurality of mobile station capabilities; and receiving, by the mobile station, a selected transmit configuration of a plurality of transmit configurations that is based on at least one of the mobile station capabilities sent, the plurality of transmit configurations including at least two of a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input configuration as recited in claim 16. Parkvall fails to disclose each and every element of independent claim 16.

With regard to independent claims 18 and 28, claims 18 and 28 include similar limitations to claim 16 and are allowable at least for the reasons stated for claim 16.

With regard to claims 2, 4-8, 10-14, 17, 27, and 29 Applicants assert that claims 2, 4-8, 10-14, 17, 27, and 29 are allowable at least because they depend from at least one of independent claims 1, 15, 16, 18, 26, and 28 which Applicants have shown to be allowable.

For at least these reasons, Applicants respectfully request that the art ground of rejection be withdrawn.

**Rejections Under 35 U.S.C. § 103**

Claim 9 is rejected under 35 U.S.C. §103(a) as being unpatentable over Parkvall in view of Allpress et al. (U.S. Patent 6,392,988 B1). Applicants respectfully traverse.

As discussed above, Parkvall fails to disclose Parkvall does not disclose receiving, from a mobile station, a plurality of mobile station capabilities and selecting one of a plurality of transmit configurations using at least one of the plurality of mobile station capabilities received, the plurality of mobile station capabilities including at least two capabilities from a list including a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input/multi-output configuration as recited in claim 1.

The Allpress et al. reference is directed to a transmitter architecture employing space time spreading and orthogonal transmit diversity techniques. The Allpress et al. reference does not disclose selecting one of a plurality of transmit configurations using information received from a mobile station wherein the plurality of transmit configurations includes at least two of: a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input configuration. Therefore, Allpress et al. cannot disclose or suggest receiving, from a mobile station, a plurality of mobile station capabilities and selecting one of a plurality of transmit configurations using at least one of the plurality of mobile station capabilities received, the plurality of mobile station capabilities including at

least two capabilities from a list including a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input/multi-output configuration as recited in claim 1. Claim 1 is not rendered obvious to one skilled in the art by Parkvall in view of Allpress et al. Claim 9 is allowable at least because it depends from independent claim 1.

Applicants respectfully request that the art grounds of rejection be withdrawn.

Claims 19-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Parkvall in view of Lee et al. (U.S. Patent No. 6,456,604 B1). Applicants respectfully traverse.

As discussed above, Parkvall fail to disclose receiving, from a mobile station, a plurality of mobile station capabilities and selecting one of a plurality of transmit configurations using at least one of the plurality of mobile station capabilities received, the plurality of mobile station capabilities including at least two capabilities from a list including a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input/multi-output configuration as recited in claim 1.

The Lee et al. reference is directed to a data communication method in a mobile communication system. Lee et al. disclose a method that serves to

increase channel efficiency by connecting and releasing channels in accordance with the presence/absence of control and traffic data transmitted during packet data communications (Abstract). Lee et al. do not disclose receiving, by a mobile station, a selected transmit configuration. Therefore, Lee et al. cannot disclose or suggest receiving, from a mobile station, a plurality of mobile station capabilities and selecting one of a plurality of transmit configurations using at least one of the plurality of mobile station capabilities received, the plurality of mobile station capabilities including at least two capabilities from a list including a single transmit antenna configuration, a space time spreading configuration, a selective transmit diversity configuration, and a multi-input/multi-output configuration as recited in claim 1. Claim 1 is not rendered obvious to one skilled in the art by Parkvall in view of Lee et al. Claims 19 and 20 are allowable at least because they depend from independent claim 1 which Applicants have shown to be allowable.

Accordingly, Applicants respectfully request that the Examiner withdraw the art grounds of rejection.

### **CONCLUSION**

In view of the foregoing, Applicants submit that claims 1-2 and 4-30 are patentable over the relied upon references, and that the application as a whole is in condition for allowance. Early and favorable notice to that effect is respectfully solicited.

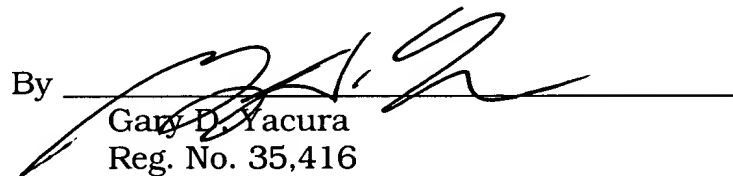
In the event that any outstanding matters remain pending in this application, Applicants request that the Examiner contact the undersigned to discuss such matters.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By



Gary D. Yacura  
Reg. No. 35,416

P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

GDY/RFS:ewd